Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.

Electronic effects in the dissociative ionisation of pyrene clusters

Gustavo A. Garcia[a], Léo Dontot[b,c], Mathias Rapacioli[c], Fernand Spiegelman[c], Philippe Bréchignac[d], Laurent Nahon[a] and Christine Joblin[b]

[a]Synchrotron SOLEIL, L'Orme des Merisiers, Départamentale 128, 91190 Saint Aubin, France
[b]Institut de Recherche en Astrophysique et Planétologie, Université de Toulouse III – Paul Sabatier, CNRS, CNES, 9 avenue du Colonel Roche, BP 44346, F-31028 Toulouse, France
[c]Laboratoire de Chimie et Physique Quantiques, FERMI, Université de Toulouse III – Paul Sabatier, CNRS, 118 Route de Narbonne, F-31062 Toulouse, France
[d]Institut des Sciences Moléculaires d'Orsay, CNRS, Université Paris-Saclay, F-91405 Orsay, France

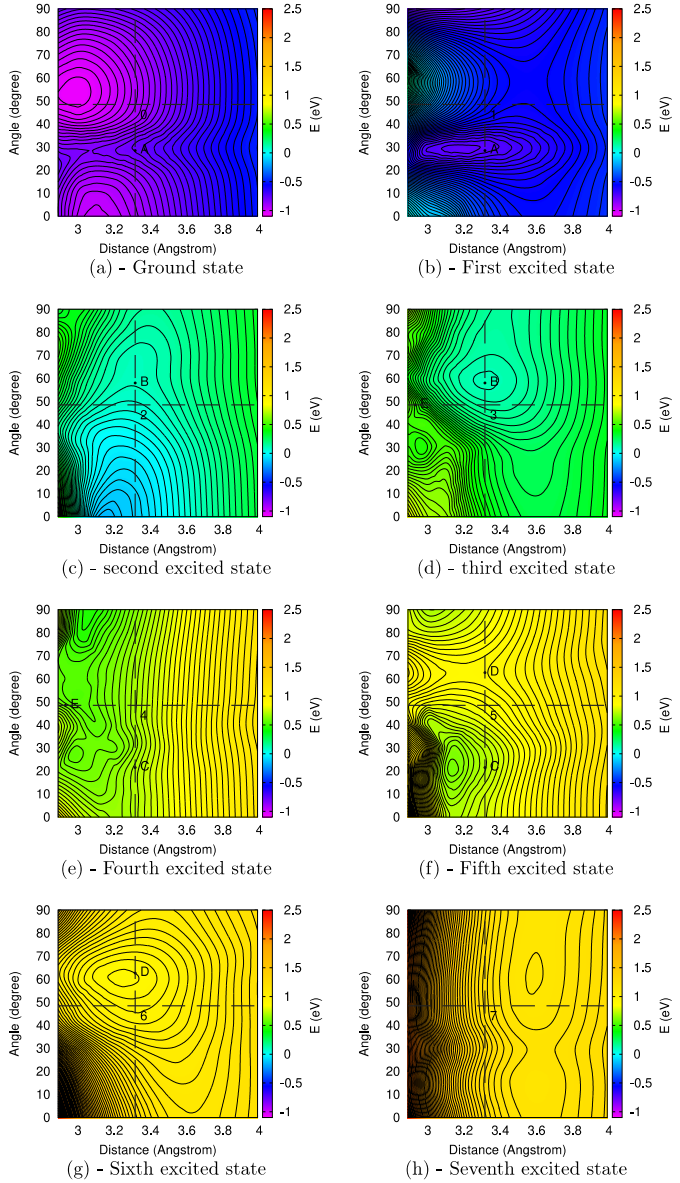

Figure S1: *Two-dimensional potential energy surfaces for the ground and first seven electronically excited states of cationic pyrene dimer. The zero of the energy colour scale corresponds to the first dissociation limit* $M_2^+ \longrightarrow M^+ + M$*, with both cationic and neutral monomers in their ground states.* The points labelled by numbers and letters are the same as those in the Figure 7 of the main article.